

ANALYST:		VPDES NO	
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Parameter: Total Residual Chlorine

Method: Chlorine Electrode

04/01

METHOD OF ANALYSIS:

X	ORION RESEARCH INSTRUCTION MANUAL
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	Y	N
1) Is the electrode an Orion Model 97-70? [Mfr.]		
2) Is distilled water prepared from an alkaline potassium permanganate solution? [Mfr.]		
3) Is electrode slope measured correctly? [Mfr.]		
4) Is slope greater than 26 mV per 10 mg/l? [Mfr.]		
5) Is 1 ppm standardizing solution prepared fresh daily? [Mfr.]		
6) Is the 1 mL residual chlorine standard, 1 mL iodide reagent, and 1 mL acid reagent swirled for at least 2 minutes before dilution to volume? [Mfr.]		
7) Is 99 mL distilled water added and mixed thoroughly? [Mfr.]		
8) Is meter calibrated to 1 ppm reading (0.00 mV) with the standardizing solution for each test? [Mfr.]		
9) Is the 100 mL of sample, 1 mL of iodide reagent, and 1 mL of acid reagent allowed to stand for at least two minutes prior to measurement? [Mfr.]		
10) Is electrode blotted dry between calibration and measurement? [Mfr.]		
11) Are the standard and samples left un-stirred during measurement? [Mfr.]		
12) Is a standard curve developed using a reagent blank and three standard solutions containing 0.2, 1.0, 5.0 mL 0.00281 N potassium iodate/100 mL solution, respectively? [40 CFR, Part 136.3, footnote 16]		
13) If measuring below 0.2 ppm, was a blank used for correcting measurement? [Mfr.]		
14) Is sample value read correctly? [Mfr.]		

PROBLEMS: